

HITCHCOCK. (E.)

Average and mean  
anthropometric data of  
Amherst College Students  
march 1888.





# AVERAGE AND MEAN ANTHROPOMETRIC DATA

—OF—  
Amherst College Students.

MARCH, 1888.

Items of Observation.		The average Amherst Student.	The Amherst Student of average Height.	The Amherst Student of "mean" Proportions.	Items of Observation.		The average Amherst Student.	The Amherst Student of average Height.	The Amherst Student of "mean" proportions.
Heights.	Weight, <small>Kilos.</small>	61.2	61.7	61.5	Lengths.	Head, <small>Millimeters.</small>	155	153	154
	Body, <small>Millimeters.</small>	1725	1725	1720		Neck,	108	108	109
	Sternum,	1410	1408	1410		Shoulder,	430	432	425
	Navel,	1030	1030	1030		Waist,	250	254	250
	Pubes,	860	862	860		Hips,	323	323	325
	Knee,	476	475	478		Nipples,	198	197	200
	Sitting,	903	902	904		Sh'lder Elbows,	372	372	370
	Head,	572	572	568		Elbow Tips,	458	462	460
	Neck,	349	352	350		Feet,	260	262	255
	Chest Repose,	880	887	890		Str'tch of Arms,	1780	1785	1781
Girths.	Chest Full,	927	928	930	Strengths.	Horiz'l Length,	1732	1730	1728
	Belly,	724	724	730		Lungs, <small>Kilos.</small>	1.5	1.3	1.5
	Hips,	900	891	900		Back,	137	138	135
	Thighs,	515	518	515		Legs,	166	164	160
	Knees,	355	357	355		Forearms,	39	38	37
	Calves,	345	348	345		Total,	454	456	450
	Insteps,	241	240	240		No. of times.			
	R. U. Arm Cont'd,	295	294	295		Dip,	6	6	6
	Upper Arms,	257	258	255		Pull Up,	9	10	10
	Elbows,	249	250	248		Lung Capacity, <small>Liters.</small>	4.11	4.19	4.27
	Forearms,	260	260	262		Part of the body.			
	Wrists,	161	165	160		Pilosity,	2.25	2.10	2.25

These are "Metric" measurements, and where the item is taken double—right and left parts—the average of the two is the record.





STATISTICS BEARING UPON THE AVERAGE AND TYPICAL STUDENT IN  
AMHERST COLLEGE, MARCH, 1888.

The three columns of figures on the opposite page are the results of an attempt to learn what are the measures and proportions of *the average student, and the student of mean proportions* in Amherst College as derived from the anthropometric data gathered in the Department of Physical Education and Hygiene.

The first column gives the *averages*—in the several different items—*of all the students* who have been connected with College from 1861-2 up to 1887-8 inclusive.

The second column gives the *averages* of the same items of those students only who were of *the average height of all College*—those whose height was 1725 millimeters, or 67.9 inches.

The third column is made up in this manner. Each item is separated into numerical groups—or columns of figures—of a small range—of a few millimeters each, and arranged side by side on a horizontal line so as to show the relative size of each one to the other, or of the largest to those of middle proportions, and of each of these to the smallest, the top of the columns representing an ascent and descent.

This will give a gradually ascending series from the left or smallest individuals to about the center of the groups, where the columns will grow shorter and shorter to the right, or to the largest individuals. The central column or the point between the two columns—if they chance to be two columns of equal numbers—will give *the mean or typical measurement of the item*.

In the item of *Height* for example, we may divide it into groups of ten millimeters or about half an inch each, beginning with 1600 to 1610 m. m. or 63 inches, and running to 1830 m. m. or 72 inches. This will give us 25 groups in all—and each man's Height as preserved in the book of Records will have been placed in the proper groups.

When all are gathered together in this manner we have an ascending series from the lowest or smallest measure to a certain point where the series begins to descend to the highest or largest measure. This point—or recorded height—where the greatest number of observations are found, constitutes the “mean” or the central point of all the heights, and is to be regarded as the typical or standard height of all the students. Hence this third column indicates the *student of mean Proportions*, while the other columns indicate the relations of the *Average Student*.



